

CLAIMS

Pub B 17  
1. A device for drawing along and guiding the flats of mobile-flat cards, in which the depositing of foreign bodies on (the guides (10)) of the flats (7) is  
5 eliminated or at least hindered, characterized in that (the drive system) for drawing along the flats, in particular by means of (the cogged belts (23)), (is equipped, in its closed development, with one or more scraping or cleaning elements (40, 41, 42) that  
10 eliminate the accumulation of foreign bodies from the guides (10), on which the resting elements of the flats (7) are drawn along.)

2. The device for drawing along and guiding card flats according to Claim 1, characterized in that the  
15 scraping and/or cleaning elements are set in the bottom face of the drive belt (23) for drawing the flats along their active path on the guides (10) and are made up of blades (40) projecting from the bottom face of the belt (23), on (the side opposite to the enlarged portions)  
20 (24).

3. The device for drawing along and guiding card flats according to Claim 2, characterized in that the blades (40) are set at right angles to the longitudinal direction of the belt (23) or at an angle that is  
25 greater or less than  $90^\circ$ , (in order to exert an action of displacement of (the impurities) removed as the blades

pass over the guides (10) towards the inside of the carding drum, or else towards the outside of said carding drum.

4. The device for drawing along and guiding card flats according to Claim 2, characterized in that the blade (40) is inclined with respect to the direction of motion of the carding drum, in order to exert an action of detachment of the layer of impurities, with a rake against the impurities that come up against it as the carding drum proceeds in its motion.

5. The device for drawing along and guiding card flats according to Claim 2, characterized in that the blade (40) is inclined with respect to the direction of motion of the carding drum, in order to exert an action of pushing of the incoherent impurities, with an inclination that is in the same direction as the direction of motion of the carding drum.

6. The device for drawing along and guiding card flats according to Claim 2, characterized in that the blade (40) has a V-shaped transverse development.

7. The device for drawing along and guiding card flats according to Claim 1, characterized in that the cleaning elements comprise a scraping element (42), consisting of a plurality of rubber studs (42) arranged in a radial direction.

8. The device for drawing along and guiding card

flats according to Claim 1, characterized in that the cleaning elements comprise a cleaning element made up of a series of bristle brushes (41) arranged along the part of the cogged belt (23) that faces its guide (10).

5        9. The device for drawing along and guiding card flats according to Claim 1, characterized in that the scraping or cleaning elements (40, 41, 42) are prepared separately and then fixed to the bottom face of the drive belt (23).

10       10. The device for drawing along and guiding card flats according to Claim 9, characterized in that the scraping or cleaning elements (40, 41, 42) of different types are used jointly on one and the same cogged belt, combining in succession scraping elements of different  
15 inclination, material and orientation and elements of removal of the scraped material.

11. The device for drawing along and guiding card flats according to Claim 1, characterized in that the scraping or cleaning elements (40, 41, 42) are set  
20 underneath enlarged portions (24) of the belts (23) in positions corresponding to each flat (7), and in that said enlarged portions all perform both the function of constraint with the flats and the function of drive  
toothing in order to provide gripping, by means of  
25 their protruding profiles, with the toothed driving and return-idler wheels (9), said enlarged portions (24)

being set apart from one another by a series of lower portions (25).

12. The device for drawing along and guiding card flats according to Claim 1, characterized in that the  
5 scraping or cleaning elements (40, 41, 42) are set in positions corresponding to the bodies (51, 55) for connection to the belt (23), said bodies (51, 55) being provided with cavities for constraint with the pins  
10 (32) of the flats (7), and being applied alternately to the belt with the sole function of constraints for the flats (7), and in that alternately set amongst the series of separate elements (51, 55) for constraint of  
15 the flats (7) is a series of separate bodies (52) with profiles which are corresponding to the toothing of the wheels (9) and are designed to mesh with the said toothing, in order to transmit driving motion for circulation of the mobile flats.

13. The device for drawing along and guiding card flats according to Claim 12, characterized in that the  
20 constraint bodies (51, 55) and the toothing bodies (52) are produced separately and then applied to the belt (23).